

We claim:

1. An article of manufacture comprising a directly refrigerated component or system in which a refrigerating pathway is provided with passive cooling moderation.

2. The article of claim 1, with a passive cooling moderator having a moderating live space and at least two cascade points.

3. The article of claim 1, with a passive cooling moderator having moderating dead space and at least two cascade points.

4. The article of claim 1, which is a test device for rotational viscometric testing of an oleaginous fluid.

5. The article of claim 2, which is a test device for rotational viscometric testing of an oleaginous fluid.

6. The article of claim 3, which is a test device for rotational viscometric testing of an oleaginous fluid.

7. The article of claim 4, which includes:

a block made of a thermally conducting material; and  
in said block:

a plurality of vertically oriented wells into

each of which can be placed a sample sleeve;

a plurality of sample sleeves, each of which is

placed into one of said wells, and each of

which can receive the oleaginous fluid and

a rotor;

a heater;

a temperature-sensing probe; and

a refrigerant pathway, in which is positioned

the passive cooling moderator.

8. The article of claim 5, which includes:

a block made of a thermally conducting material; and  
in said block:

a plurality of vertically oriented wells into  
each of which can be placed a sample sleeve;  
a plurality of sample sleeves, each of which is  
placed into one of said wells, and each of  
which can receive the oleaginous fluid and  
a rotor;

a heater;

a temperature-sensing probe; and

a refrigerant pathway, in which is positioned  
the passive cooling moderator.

9. The article of claim 6, which includes:

a block made of a thermally conducting material; and  
in said block:

a plurality of vertically oriented wells into  
each of which can be placed a sample sleeve;  
a plurality of sample sleeves, each of which is  
placed into one of said wells, and each of  
which can receive the oleaginous fluid and  
a rotor;

a heater;

a temperature-sensing probe; and

a refrigerant pathway, in which is positioned

the passive cooling moderator.

10. The article of claim 8, wherein said block has a shape of a rectangularly shaped cube; the heater embraces a plurality of heaters inserted into said block horizontally; the temperature-sensing probe embraces at least one such probe that is inserted into said block vertically; and the refrigerant pathway embraces a plurality of refrigerant pathways, in each of which is positioned the passive cooling moderator.

11. The article of claim 9, wherein said block has a shape of a rectangularly shaped cube; the heater embraces a plurality of heaters inserted into said block horizontally; the temperature-sensing probe embraces at least one such probe that is inserted into said block vertically; and the refrigerant pathway embraces a plurality of refrigerant pathways, in each of which is positioned the passive cooling moderator.

12. The article of claim 7, wherein said each of the sample sleeves is stopped from rotating in the well in which it is placed through a pin and pin-engaging hole or slot arrangement.

13. The article of claim 10, wherein said each of the sample sleeves is stopped from rotating in the well in which it is placed through a pin and pin-engaging hole or slot arrangement.

14. The article of claim 11, wherein said each of the sample sleeves is stopped from rotating in the well in which it is placed through a pin and pin-engaging hole or slot arrangement.

15. In a laboratory test apparatus for testing low temperature viscometric or rheologic properties of a sample,

which includes:

a refrigerated, thermally conducting block; and

in said block:

a plurality of vertically oriented wells into

each of which can be placed a sample sleeve; and

a plurality of sample sleeves, each of which is

placed into one of said wells, and each of

which can receive the oleaginous fluid and

a rotor;

the improvement that comprises each of the sample sleeves being stopped from rotating in the well in which it is placed through a pin and pin-engaging hole or slot arrangement.

16. A method for cooling an article of manufacture that is a directly refrigeratable component or system in which a refrigerating pathway is provided with passive cooling moderation, which comprises:

providing said article; and

introducing refrigerant into the refrigerating pathway.

17. The method of claim 16, wherein a passive cooling moderator with moderating live space provides said moderation, and an oleaginous fluid is viscometrically/rheologically tested rotationally.

18. The method of claim 16, wherein a passive cooling moderator with moderating live space provides said moderation, and an oleaginous fluid is viscometrically/rheologically tested rotationally.